

Application No. 10/625,081
Response to Office Action

Customer No. 01933

Amendments to the Specification:

Please amend the paragraph at page 6, lines 4-11 as follows:

In the circle structure of the motor grader, a connection (spigot) part at which the circle gear and the circle are fitted to each other may be further included. According to this constitution, even if the circle gear is rotated, the circle gear and the circle ring slide on the circumference of the connection (spigot) part and rotate with respect to each other, and therefore the positions are not displaced, thus facilitating positioning of the bolt holes and the tap holes.

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Please amend the paragraph at page 10, line 25 to page 11,
line 12 as follows:

The tap holes 216 are provided at, for example, 36 spots at a top portion of the cylindrical circle ring 104R. A cylindrical stepped portion 104RD of which inner circumferential side is lowered downward from an outer circumferential side of the undersurface is provided at a top surface 104RU of the circle ring 104R. The stepped portion 211D of the undersurface 211K of the circle gear 211 and the stepped portion 104RD of the top surface 104 RU of the circle ring 104R are fitted to each other. Thereby, a connection (spigot) part 211H, at which a center of the circle gear 211 and a center of the circle ring 104R of the circle 104 are aligned, is formed. The connection (spigot) part 211H can facilitate positioning of the circle gear 211 with respect to the circle ring 104R.

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Please amend the paragraph at page 13, lines 7-21 as follows:

Next, the lift cylinders 111a and 111b are slightly contracted to lift the drawbar 105. Since the circle gear 211 is supported at the drawbar 105 by the guide shoes 213 in this situation, it is raised slightly, and the circle ring 104R is separated from the circle gear 211. Due to this, the blade 103 remains in contact with the ground, and the circle 104 stays in its position without rising. As a result, a small clearance occurs between the undersurface 211K of the circle gear 211 and the top surface 104RU of the circle ring 104R. In this case, a contraction amount of the lift cylinders 111a and 111b is adjusted, and the small clearance between the undersurface 211K and the top surface 104RU can be made such a clearance that the connection (spigot) part 211H is not removed with the stepped portion 211D of the undersurface 211K and the stepped portion 104RD of the top surface 104RU being fitted to each other.

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Please amend the paragraph at page 14, lines 14-24 as follows:

The small clearance between the undersurface of the circle gear 211 and the top surface of the circle ring 104R is made such a clearance that the connection (spigot) part 211H is not removed. Due to this, even if the hydraulic motor 113 is driven and thereby the circle gear 211 is rotated in order to move the broken or worn portion of the circle gear 211 out of the use range, the circle gear 211 and the circle ring 104R slide on the circumference of the connection (spigot) part 211H and rotate with respect to each other and therefore the positions thereof are not displaced, thus facilitating positioning of the bolt holes 211A and the tap holes 216.

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Please amend the paragraph at page 15, line 23 to page 16,
line 11 as follows:

The connection (spigot) part 211H is provided between the circle gear 211 and the circle ring 104R. Due to this, even if the circle gear 211 is rotated with a tool such as a bar, or even if the hydraulic motor 113 is driven and thereby the circle gear 211 is rotated, the circle gear 211 and the circle ring 104R slide on the circumference of the connection (spigot) part 211H and rotate with respect to each other, and therefore the positions are not displaced, thus facilitating positioning of the bolt holes 211A and the tap holes 216. Since the circle gear 211 is in an integrated ring shape, the circularity as a ring gear is high in precision, and even if the circle gear is mounted with the position of a worn or broken portion being displaced, and reassembled, the precision of the entire ring gear is high, thus providing favorable gear contact, as a result of which, the durability is improved.